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15.2000

Z/009/60/000/08/029/036  
E112/E153AUTHORS: Václav Chvalovský and Jiří RathouskýTITLE: The Hydrophobic Properties of Glass Treated with  
Methyl Silicones and Methyl Hydrosilicones

PERIODICAL: Chemický Průmysl, 1960, No 8, pp 433-437

ABSTRACT: A hydrophobic treatment of glass and ceramics which has to withstand high temperatures is provided by methyl-silicones. Their hardening on the glass surfaces is accomplished by partial oxidation of the methyl groups at temperatures of 260 to 320 °C. For the hydrophobization of glass surfaces which do not have to withstand the same amount of heat methylhydrosilicones are used industrially. Hardening of the films takes place at 100 to 200 °C by oxidation of the hydrogen atoms linked directly to silicium. Information in the literature about degree of hydrophobization as a function of molecular weight of the methyl- or methylhydrosilicones and their resistance to chemical attack is incomplete. Furthermore, no comparison is given between an application of these agents from organic solvents or aqueous emulsions. The object of the present paper is to fill this gap. Preparation of methyl- and methylhydrosilicones used is as follows.

Card 1/4

81883

Z/009/60/000/08/029/036  
E112/E153

The Hydrophobic Properties of Glass Treated with Methyl Silicones  
and Methyl Hydrosilicones

I. Methylsilicones - by linear polymerization of octamethylcyclotetrasiloxane with hexamethyldisiloxane in presence of 3% sulphuric acid. II. Methylhydrosilicones - compound having a ratio  $\text{CH}_3/\text{H} = 3.68, 2.95, 2.31$  and 1.55 by reacting a mixture of dimethylsiloxane, methylhydrosiloxanes and hexamethyldisiloxane in presence of 6% sulphuric acid for 3 hours. Methylhydrosiloxanes with a ratio  $\text{CH}_3/\text{H} = 1$  were prepared by using a mixture of cyclic methylhydrosiloxanes, obtained by hydrolysis of methyldichlorosilane ( $\text{CH}_3\text{SiHCl}_2$ ). Aqueous emulsions of both types of compounds were prepared by using the following emulsifiers: triethanolamine oleate, triethanolamine-ricino sulphonate and dimethylcetylbenzyl-ammoniumchloride. The following stability tests were carried out:  
Resistance of films to high temperatures. Treated glass surfaces were exposed for 2 hours at 250 °C or 12 hours at 250 °C or 12 hours at 300 °C. Resistance to chemical attack was assessed by exposing treated glass surfaces to the action of NaOH, NaCl and HCl for specified times and at specified temperatures. Tests also included stabilities to organic solvents. All assessments are based on the contact-angle method (angle of wetting with water). The effect of methylsilicones was independent of viscosities within

Card 2/4

81883  
Z/009/60/000/08/029/036  
E112/E153

The Hydrophobic Properties of Glass Treated with Methyl Silicones  
and Methyl Hydrosilicones

a range of 50-1000 c St. It was further unaffected by change of concentration within a range of 0.5-2.0%. Methods of hardening greatly affect the hydrophobing effect, without, however, influencing stability of the films. The hydrophobing effects of the aqueous emulsions were generally found to be better than those of solvent application. Type of emulsifier used did not influence results. Resistance of the films to high temperatures, benzene and aqueous solutions of chemicals with the exception of alkalis was found to be very good. (Initial stability of films to dilute alkalis was found to be adequate. However, contact angles gradually decrease and it is, therefore, not possible to store alkalis in glass which had been hydrophobed with methylsilicones.) The hydrophobing action of solutions or emulsions of methylhydrosilicones and the thermal stabilities of their films decrease as the ratio CH<sub>3</sub>/H decreases. They are generally lower than those obtained from the methylsilicones. The hydrophobing effect is again independent

Card 3/4

81883

Z/009/60/000/08/029/036  
E112/E153

The Hydrophobic Properties of Glass Treated with Methyl Silicones  
and Methyl Hydrosilicones

of concentration within a range of 0.5-2.0%. Aqueous emulsions  
are also more efficient than application from organic solvents  
(toluene). Resistance to high temperatures and dilute aqueous  
solutions of chemicals is, with the exception of alkalis,  
adequate. The films show also good resistance to benzene.  
There are 1 figure, 7 tables and 5 references, of which 3 are  
English and 2 Czech.

ASSOCIATION: Chemicky ústav ČSAV, Praha  
(Chemical Institute, Czechoslovak Academy of Sciences,  
Prague)

SUBMITTED: August 12, 1959

Card 4/4

X

CHVALOVSKY, V.

Distr: 4E2c(j)/4E3d

✓ Organosilicon compounds. XX. Determination of the basicity of the silicon-bound oxygen by infrared spectroscopy. M. Horák, V. Balant, and V. Chvalovský (Ústav org. chemie a biochemie ČSAV, Prague). Collection Czechoslov. Chem. Commun. 25, 2822-30 (1960) (in German); cf. CA 54, 24478a.—The formation of the H-bond between various proton donors and isostructural alkyl ethers, siloxanes, and siloxanes was studied. The basicity of the O atoms decreases in the series of groups: COC, COSi, and SiOSi; this effect is attributed to the partial formation of the multiple bond in the SiO group. The induction and steric effects of alkyl groups on H-bond formation were studied. E. Erdélyi

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bw(BW)  
JAJ(WB)(MAY)  
2

PHASE I BOOK EXPLOITATION SOV/5851

Bažant, V., V. Chvalovský, and J. Rathouský (State Prize Winners)

Silikony: kremniyorganicheskiye soyedineniya, ikh polucheniye,  
svoystva i primeneniye (Silicons: Organosilicon Compounds,  
Their Production, Properties, and Application) Moscow, Gosl -  
khimizdat, 1960. 709 p. Errata slip inserted. 4000 copies  
printed.

Translated from the Czech by Yu. I. Vaynshteyn and V. I. Stanko.  
Ed.: V. I. Pakhomov; Tech. Ed.: V. F. Zazul'skaya.

PURPOSE : This book is intended for scientists, engineers, and  
technicians in industries which produce or utilize silicon  
materials.

COVERAGE: The monograph is a Russian-language translation from  
the original Czech which reviews the nomenclature of organo-  
silicon compounds, their properties, methods of producing vari-  
ous classes of organosilicon compounds and polymeric materials

Card 1/5  
2

Silicons: Organosilicon Compounds (Qont.)

SOV/5851

made from silicon compounds. The book purportedly embraces almost all of the available information on organosilicon compounds. A special chapter deals with methods of analyzing organosilicon compounds, and a section has been added on their physiological properties, i. e., their use in medicine, pharmacy, cosmetics preparation, etc. The authors thank Academician F. Shorm, Director of the Institute of Organic Chemistry, Czechoslovak Academy of Sciences. There are 5200 references, including 2900 added for the Russian edition.

TABLE OF CONTENTS [Abridged]:

Ch. I. Introduction	15
Ch. II. Nomenclature of Organosilicon Compounds	21
Ch. III. Silicon Compounds With Covalent Bonds	37
Ch. IV. Methods of Obtaining Organosilicon Compounds	52
Card 2/5	

HORAK, M.; BAZANT, V.; CHVALOVSKY, V.

Silicon organic compounds. Determination of basicity of oxygen bound by silicon by means of infrared spectroscopy. Coll Cz Chem 25 no.11:2822-2830 N '60. (EEAI 10:6)

1. Institut fur organische Chemie und Biochemie und Institut fur theoretische Grundlagen der chemischen Technik, Tschechoslowakische Akademie der Wissenschaften, Prag.

(Silicon) (Oxygen) (Spectrum, Infrared)  
(Organic compounds)

BENES, J.; CHVALOVSKY, V.; BAZANT, V.

Silicon organic compounds. XIV. Effect of the structure of methyl-phenyl silanes on its oxidation rate. XXVI. Effect of the structure of methylphenyl siloxanes on its oxidation rate. Coll Cz chem 26 no.6:1617-1635 Je '61.

1. Institut fur theoretische Grundlagen der chemischen Technik,  
Tschechoslowakische Akademie der Wissenschaften, Prague.

(Silicon organic compounds)

40289

S/081/62/000/014/010/039  
B166/B144

5.3700

AUTHORS: Beneš, J., Chvalovský, V., Bažant, V.

TITLE: Organosilicon compounds. XXVI. The influence of structure  
on the oxidation rate of methyl-phenyl siloxanesPERIODICAL: Referativnyy zhurnal. Khimiya, no. 14, 1962, 275, abstract  
14Zh298 (Collect. Czechosl. Chem. Comms., v. 26, no. 6,  
1961, 1627-1635)

TEXT: The selective oxidation rate of the  $\text{CH}_3$  group in  $[(\text{CH}_3)_3\text{Si}]_2\text{O}$  (I),  
 $[(\text{CH}_3)_n(\text{C}_6\text{H}_5)_{3-n}\text{Si}]_2\text{O}$  (II) ( $n = 1-2$ ) and  $[(\text{CH}_3)_n(\text{C}_6\text{H}_5)_{2-n}\text{SiO}]_4$  (III)  
( $n = 1-2$ ) was studied in the gaseous phase at  $350-450^\circ\text{C}$ . With increase in  
the number of O atoms around the Si linked with the  $\text{CH}_3$  group, the rate  
constant and the activation energy of the reaction decrease. When the  $\text{CH}_3$   
groups are substituted by phenyl groups the reaction rate decreases as a  
result of the spatial influence of the phenyl groups. An anomalous  
influence of the surface of the glass on the reaction rate was detected

X

Card 1/2

Organosilicon compounds. XXVI. ...

S/081/62/000/014/010/039  
B166/B144

for I and II. The oxidation products of I, II and III are HCOH, HCOOH,  
CO<sub>2</sub> and CO. For communication XXV see RZhKhim, 1962, 11Zh58.

[Abstracter's note: Complete translation.]

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Card 2/2

40208

S/081/62/000/015/008/038  
B168/B101*5.3700*  
AUTHORS: Jirinec, S., Bazant, V., Chvalovsky, V.

TITLE: Organosilicon compounds. XXVII. Reduction of alkoxychlorosilanes by metal hydrides.

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 15, 1962, 256 - 257,  
abstract 15Zh286 (Collect. Czechosl. Chem. Commun., v.26,  
no. 7, 1961, 1815 - 1825)TEXT: The reduction of  $(RO)_3SiCl$  (Ia-c, where (a) R =  $C_2H_5$ , (b) R = iso-  
 $C_3H_7$ , (c) R = tert- $C_4H_9$ ),  $R_2SiCl(OR')$  (IIa-c, where (a) R = R' =  $C_2H_5$ ;  
(b) R =  $C_2H_5$ , R' = tert- $C_4H_9$ ; (c) R = R' =  $CH_3$ ) and  $C_6H_5SiCl(OC_3H_7\text{-iso})_2$   
(III) by the action of  $LiAlH_4$  (IV),  $LiAl$  (tert- $C_4H_9O)_3H$  (V), and  
 $NaB(OCH_3)_3H$  (VI) was studied. The Si-Cl bond was reduced much more easily  
than the Si-OR bond; hence the alkoxychlorosilanes could be reduced selectively  
to the corresponding alkoxyhydridesilanes. When IV and VI were used  
Card 1/4

S/081/62/000/015/008/038  
B168/B101

Organosilicon compounds. ...

the reduction was accompanied by condensation reactions and regroupings, as a result of which the alkoxyhydridesilanes could not be isolated. When V was used the role played by the side reactions diminished, although in the case of the ethoxy derivatives the ( $C_2H_5O$ ) groups were partially substituted by (*tert*- $C_4H_9O$ ) groups. The influence of the structure and number of R-Si bonds on the reactive capacity of alkoxychlorosilanes was studied. When alkoxychlorosilanes reacted with anhydrous  $AlCl_3$ , the corresponding alkyl-chlorides were produced. 43 ml ether solution of 37.7 mmole IV was added to a solution of 0.151 mole Ia in 150 ml ether in an  $N_2$  atmosphere (-70°C, 3 hr); after agitation for 30 hr the temperature of the mixture was raised to 20°C (0.771 g SiH being liberated during this period) and 1.1 g of the initial Ia and 2.5 g  $(C_2H_5O)_4Si$  (VII) were isolated by distillation of the filtrate. Reduction of 43 g  $^4Ia$  with an excess of V in tetrahydrofuran (60-100 hr) produced  $(C_2H_5O)SiH$ . The following figures in reference to the substances isolated are given in the order yield in %, boiling point in °C/mm,  $n^{25}_D$ ,  $d^{25}_4$ : 2.9, 38-42/21, 1.6796, -;  $(C_2H_5O)_2(^{tert}-C_4H_9O)SiH$ , 12.6, 46-47.5/13, 1.3826, 0.864;  $(C_2H_5O)_2(^{tert}-C_4H_9O)_2SiH$ , 10.6, 57-58/13, -, -; VII, 24, 59-60/13, 1.3810, 0.920, and  $SiH_4$ . Reduction of 35 g Ib by the

Card 2/4

S/081/62/000/015/006/036  
B168/B101

Organosilicon compounds. ...

action of V produced  $(\text{iso-C}_3\text{H}_7\text{O})_3\text{SiOSiH}(\text{O-C}_3\text{H}_7\text{-iso})_2$ , 4, 78-79/3.5, 1.3907, 0.9501;  $(\text{iso-C}_3\text{H}_7\text{O})_6\text{Si}_3\text{H}_2\text{O}_2$ , 3.3, 120-123/4, 1.3940, 0.964,  $(\text{iso-C}_3\text{H}_7\text{O})_4\text{Si}$ , 21.5, 82/18.5, 1.3840, 0.873, and  $\text{SiH}_4$ . Under these conditions Ic remained unchanged. Reduction of 41.5 g IIa by the action of V resulted in (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>SiH<sub>2</sub>, 4.8, -, -; (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>SiH(OC<sub>2</sub>H<sub>5</sub>)<sub>2</sub>, 29.7, 53-54/89, 1.3989, 0.786; (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>SiH(OC<sub>2</sub>H<sub>9</sub>-tert), 10.7, 55.5-56/38, -, -; (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>Si(OC<sub>2</sub>H<sub>5</sub>)<sub>2</sub>, 41.4, 72-73/38, 1.3987, 0.858; (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>Si(OC<sub>2</sub>H<sub>5</sub>)<sub>2</sub>(OC<sub>2</sub>H<sub>9</sub>-tert), 1.2, 58-60/13, -, -; and [(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>HSi]<sub>2</sub>O, 9.3, 55-56/13, -, 0.797. Reduction of 39 g IIb under corresponding conditions produced (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>SiH(OC<sub>2</sub>H<sub>9</sub>-tert), 32.2, 58-58.5/49, 1.4031, 0.793; (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>Si(OC<sub>2</sub>H<sub>9</sub>-tert)<sub>2</sub>, 1.7, 82.5-83.5/49, -, -; [(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>HSi]<sub>2</sub>O, 21, 56-58/13, 1.4170, 0.821, and (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>Si[OSi(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>H]<sub>2</sub>, 8.1, 85.5/2.5, 1.4189, 0.871. Reduction of 26 g III under the same conditions resulted in C<sub>6</sub>H<sub>5</sub>SiH<sub>3</sub>, 2.6, 53-55/100, -, -; C<sub>6</sub>H<sub>5</sub>SiH(OC<sub>3</sub>H<sub>7</sub>-iso)<sub>2</sub>, 4.5, 74-76/3, -, -; C<sub>6</sub>H<sub>5</sub>SiCl(OC<sub>3</sub>H<sub>7</sub>-iso)<sub>2</sub>, 8.5, 87-89/3.5, -, -;

Card 3/4

Organosilicon compounds....

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B168/B101

$C_6H_5Si(OC_3H_7\text{-iso})_3$ , 19.5, 82-83/1.3, 1.4493, 0.945, and  $[C_6H_5SiH(OC_3H_7\text{-iso})_2]_n$ , 5.8, 130-135/0.9, -, -. Reduction of 17.2 g IIc by the action VI produced  $(CH_3)_2SiH_2$ , yield 40.3%,  $(CH_3)_2SiCl_2$ , yield 2.9%, and  $(CH_3)_2Si(OCH_3)_2$ , 36.8, 74/740, 1.3699, 0.861. 1 g anhydrous  $AlCl_3$  was added to 5 g Ia (72-90°C, 110 min.) and the reaction products yielded 1.3 g  $C_2H_5Cl$ . Under analogous conditions  $(C_2H_5O)_2SiCl_2$  and  $AlCl_3$  (78 min.) yielded 93%  $C_2H_5Cl$ ; IIb and  $AlCl_3$  (12 min.) produced iso- $C_3H_7Cl$ , yield 86%; (iso- $C_3H_7O)_2SiCl_2$  and  $AlCl_3$  (6 min.) yielded 98% iso- $C_3H_7Cl$ ; IIa and  $AlCl_3$  (300 min.) yielded 39%  $C_2H_5Cl$ . Report XXVI, see RZhKhim, 1962, 14Zh298. [Abstracter's note: Complete translation.]

Card 4/4

CHVALOVSKY, V.

IRZHINETS[Jirinec], S.; BAZHANT[Bazant], V.; KHVALOVSKII[Chvalovsky], V.

Organic silicon compounds. Part 27: Reduction of alkoxychlorsilanes  
by means of metal hydrides. Coll Cz Chem 26 no.7:1815-1825 Jl '61.

1. Institut teoreticheskikh osnov khimicheskoy tekhniki, Chekhoslo-  
vatskaya akademya nauk, Praga.

(Silicon compounds) (Hydrides) (Silane)

CUDLIN, J.; CHVALOVSKY, V.

Organosilicon compounds. Part 30: Addition of dichloromethylene  
on trimethylsilyl-substituted alkenes. Coll Cz Chem 27 no.7:1658-1665  
Jl '62.

1. Institute for Chemical Process Fundamentals, Czechoslovak  
Academy of Sciences, Prague.

Z/009/63/000/001/004/006  
E112/E435

AUTHORS: Chvalovsky, Vaclav; Rathousky, Jiri; Doubrava, Josef  
TITLE: Preparation and properties of polymethylethoxysiloxanes  
PERIODICAL: Chemicky prumysl, no.1, 1963, 49-52

TEXT: The preparation and some properties of polysiloxanes having methyl- and ethoxygroups attached to silicon are described. The aim was to combine the hydrophobic properties of the alkyl-polysiloxanes with adhesive properties (e.g. to ceramics) of the ethoxypolysiloxanes. The compounds were prepared by controlled ethanolysis of methyltrichlorosilane. The most important application of the compounds hinges upon the hydrolysis of the ethoxygroup and the ability to deposit methyl-silicic acid from solution. The acid-catalysed hydrolysis (HCl) of methylethoxysiloxane and its mixtures with ethyl silicate 40 was studied. The products of hydrolysis were mixed with ground sandstone and magnesium oxide (catalyst) and their binding, hydrophobic and mechanical properties evaluated. Results: 1) Addition of catalyst is essential. 2) The mechanical strength of the bonded samples increases with increasing number of methyl groups and is

Card 1/2

Preparation and properties ...

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E112/E435

considerably higher than that achieved with ethyl silicates (in compression 1.5 times as high, in tension 3 times as high: this applies to specimens with  $\text{CH}_3:\text{Si} = 0.75$ ). 3) The ratio  $\text{CH}_3:\text{Si}$  should be below 1.0 as otherwise rate of hardening is too slow. 4) The hydrophobing properties are excellent, about twenty times those of ethyl silicates and at least equivalent to sodium methylsilanolate. The compounds are recommended for acid-resistant and electrically insulating refractory binders. There are 6 figures and 3 tables.

ASSOCIATION: Ústav teoretických základů chemické techniky ČSAV,  
Praha (Institute for the Theoretical Fundamentals of  
Chemical Technology, Czechoslovak AS, Prague)

SUBMITTED: May 28, 1962

Card 2/2

CHVALOVSKY, Vaclav; RATHOUSKY, Jiri; DOUBRAVA, Josef

Preparation of the methylethoxysiloxane polymers and their properties.  
Chem prum 13 no.1:49-53 Ja '63.

1. Ustav teoretickych zakladu chemicke techniky, Ceskoslovenska  
akademie vedy, Praha.

KNIZEK, J. I. HORAK, M.; CHVALOVSKY, V.

Organosilicon compounds. Pt.31. Coll Cz Chem 28 no.11:  
3079-3087 N°63.

1. Research Institute of Organic Syntheses, Pardubice-Rybitvi,  
Institute of Organic Chemistry and Biochemistry, Czechoslovak  
Academy of Sciences, Prague, and Institute for Chemical  
Process Fundamentals, Czechoslovak Academy of Sciences, Prague.

CUDLIN, J., CHVALOVSKY, V.

Organosilicon compounds, Pt.32. Coll Cz Chem 28 no.11:  
3068-3095 N°63.

1. Institute for Chemical Process Fundamentals, Czechoslovak  
Academy of Sciences, Prague.

CUDLIN, J.; SCHRAML, J.; CHVALOVSKY, V.

Organosilicon compounds. Pt.35. Coll Cz Chem 29 no. 6:1476-

1. Institute of Chemical Process Fundamentals, Czechoslovak  
Academy of Sciences, Prague.

KNIZEK, J.; CHVALOVSKY, V.; HORAK, M.

Organosilicon compounds. Pt. 37. Coll Oz Chem 29 no.12:2935-2949  
D '64.

1. Research Institute of Organic Syntheses, Pardubice-Rybitvi.

HETFLEJS, J.; MAROS, F.; CHVALOVSKY, V.

Organosilicon compounds. Pt.39. Coll Cz Chem 30 no.5:1643-  
1653 My '65.

1. Institute for Chemical Process Fundamentals of the  
Czechoslovak Academy of Sciences, Prague. July 22, 1964.

CZECHOSLOVAKIA

SCHRAML, J.; CIVALOVSKY, V.

Institute for Chemical Process Fundamentals, Czechoslovak Academy  
of Sciences, Prague (for both)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb  
1966, pp 503-514

"Organosilicon compounds. Part 42: IR spectra of certain vinylsilanes."

CHVALOVSKY, V.

CEECINOLASTA

METELKA, J.; NEMEC, F.; CHVALOVSKY, V.

Institute for Chemical Process Fundamentals, Czechoslovak Academy  
of Sciences, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 2,  
Feb 1966, pp 346-361

"Organic-silicon compounds. Part 4): The effect of oxygenous substitu-  
tutes on alkaline solvolysis of organo-silicon hydrides."

CZECHOSLOVAKIA

JAKOUBKOVA, M; HORAK, M; CHVALOVSKY, V.

1. Institute for Chemical Process Fundamentals, Czechoslovak Academy of Sciences, Prague (for Jakoubkova and Chvalovsky). 2: Institute of Physical Chemistry, Czechoslovak Academy of Sciences, Prague (for Horak)

Prague, Collection of Czechoslovak Chemical Communications, No 3, March 1966, pp 979-996

"Organosilicon compounds. Part 46: Infrared spectra of silyl- and silylmethyl-substituted cyclopropane derivatives".

CZECHOSLOVAKIA

SCHRAML, J; CHVALOVSKY, V

Institute for Chemical Process Fundamentals, Czechoslovak Academy of Sciences, Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications, No 3, March 1966, pp 1411-1412

"Organosilicon compounds. Part 47: On the interpretation  
on nmr spectra of substituted silyl ethylenes."

CZECHOSLOVAKIA

HRADIL, J; CHVALOVSKY, V

Institute of Theoretical Foundations of Chemical  
Engineering, Czechoslovak Academy of Sciences,  
Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communica-  
tions, No 1, January 1967, pp 171-182

"Organosilicon compounds. Part 49: Radical of halo-  
genation of silyl substituents toluenes."

CZECHOSLOVAKIA

MARES, F; CHVALOVSKY, V

Institute for Chemical Process Fundamentals, Czechoslovak Academy of Sciences, Prague-Suchdol - (for both)

Prague, Collection of Czechoslovak Chemical Communications  
No 1, January 1967, pp 382-397

"Organosilicon compounds. Part 50: Pyrolysis of phenyl-dimethylsilane."

ACC NR: AP6022860

(A)

SOURCE CODE: CZ/0009/66/000/004/0207/0209

AUTHOR: Chvalovskiy, Vaclav; Bazzant, Vladimir

ORG: Institute of the Theoretical Foundations of Chemical Technical Technology of  
Czechoslovak Academy of Sciences (Ustav teoretickych zakladu chemicke techniky CSAV), PragueTITLE: Dephenylation of phenyl chlorosilanes by the action of the contact material  
under conditions of one-stage synthesis

SOURCE: Chemicky prumysl, no. 4, 1966, 207-209

TOPIC TAGS: silane, phenylalanine, synthetic material, chemical reaction, phenylation

ABSTRACT: The purpose of this study was to determine whether the heat used in the one-stage synthesis of phenyl chlorosilanes leads to a reaction between the phenyl chlorosilanes and the surface of the contact material, and if so, what kind of a reaction takes place. The dephenylation reaction investigated proceeds on the activated surface of the contact material, a mixture of powdered technical-grade silicon and copper. Activation of the contact surface and dephenylation of the phenyl chlorosilanes was accomplished without addition of hydrogen chloride. It was also desired to determine whether the surface of the contact material catalyzes the reaction between the phenyl chlorosilanes and the hydrogen chloride which was used in the one-stage

Card 1/2

ACC NR: AP6022860

synthesis of the phenyl chlorosilanes as another reaction component, and to determine what type of reaction this is. As a consequence of the fact that the reaction is question proceeds, in the one-stage synthesis of phenyl chlorosilanes, as a mixed reaction on a relatively small scale, it has not been possible so far to make it manifest in the kinetic studies which have been made. It is pointed out that the present investigation is purely qualitative in its scope. It is shown that for the most part without the addition of hydrogen chloride, the chlorbenzen-formation reaction proceeds, and with the addition of hydrogen chloride benzene is formed. The probable mechanism of these reactions is discussed. Orig. art. has: 8 tables.

SUB CODE: 07/ SUBM DATE: 28Dec65/ ORIG REF: 003/ SOV REF: 006/ OTH REF: 010

Card 2/2

VISHNEVSKIY, A.S., prof.; KHODYKIN, A.V., kand.med.nauk; Prinimali uchastiye:  
GLUSHKO, B.I., vrach; CHVAMANIYA, A.Ye., vrach; TURANSKAYA, A.G.,  
vrach; LEVITSKAYA, A.S., vrach; GOLUBEVA, L.V., vrach.

Use of cortisone and dehydrcortisone in the treatment of severe  
hepatitis and liver cirrhosis. Vrach. delo no.8:35-38 Ag '61.  
(MIRA 15:3)

1. Kurortnaya poliklinika, Yessentuki.  
(CORTISONE)  
(LIVER--DISEASES)

VISHNEVSKIY, A.S.; KHODYKIN, A.V.; CHVAMANIYA, A.Ye.; Prinimali  
uchastiye: TURANSKAYA, A.G., vrach; BARNOVA, M.M., vrach;  
LEVITSKAYA, L.S., vrach; BUBLIK, V.S., vrach; KUZNETSOVA,  
M.M., vrach

Clinical aspect and treatment of chronic pancreatitis at  
a health resort. Vop. kur., fizioter. i lech. fiz. kul't  
29 no.1:23-27 '64. (MIRA 17:9)

1. Yessentukskaya kurortnaya poliklinika (glavnnyy vrach  
F.G. Sendarovich.

ZAREMBA, Ye.M.; CHVAMANIYA, A.Ye.; KUVARDINA, N.M.; BELKIN, M.L.; MALYKHINA, A.F.; NEPLOTNIK, I.F.; CHUCHENKO, R.I.; MATUSYAK, Ye.I.

Comparative evaluation of various methods of gastric lavage with "Yessentuki" No.4 mineral water in chronic gastritis. Sbor. nauch. rab. vrach. san.-kur. uchr. profaciuzov no.1:79-83 '64.

(MIRA 18:10)

1. Yessentukskiy sanatoriy imeni I.P.Pavlova (glavnyy vrach A.Ye. Chvamaniya, nauchnyy rukovoditel' kand.med.nauk I.I.Konovalov).

VISHNEVSKIY, A.S.; KHODYKIN, A.V.; Prinimali uchastiye: VESELOV, I.A.,  
vrach; PINCHUKOV, Ye.F., vrach; GLUSHKO, B.I., vrach;  
CHVAMANIYA, A.Ye., vrach; FILIPPOVA, Ye.I., vrach; GOLUBOVA, L.M.,  
vrach; SHEVCHENKO, M.M., vrach; MALYGINA, V.F., vrach

Sanatorium and health resort treatment of chronic pancreatitis  
(immediate and late results). Trudy TSIU 72:110-122 '64.

(MIRA 18:11)

1. Kafedra kurortnoy terapii (zav. prof. A.S. Vishnevskiy)  
TSentral'nogo instituta usovershenstvovaniya vrachey.

KUDRYAVTSEV, N.T.; TYUTINA, K.M.; CHVANKIN, I.V.

Determining the thickness of tin-nickel coatings. Zav.lab. 26  
no.3:301-302 '60. (MIHA 13:6)  
(Tin-nickel alloys)

34384

S/539/61/000/032/013/017  
D204/D301

11800

AUTHORS: Kudryavtsev, N.T., Tyutina, K.M., Chvankin, I.V. and  
Tsupak, T.Ye.TITLE: Electrodeposition of a Sn-Ni alloy from alkaline cyanide  
solutionsSOURCE: Moscow. Khimiko-tekhnologicheskiy institut. Trudy, no. 32,  
1961. Issledovaniya v oblasti elektrokhimii, 283-288

TEXT: A study of the joint deposition of Ni and Sn from stannate solutions containing additions of complex Ni cyanide. The influence of Ni concentration in the solution and of current density,  $D_k$ , on the quality, composition and current efficiency of the alloy were studied at 65°, 75°, and 85°C, depositing the metals on brass or Ti plates. Cathode potentials at various  $D_k$ 's were measured during the deposition of the alloy and of Sn alone. Alloys with 10~26% Ni could be obtained from solutions containing 0.12 ~ 0.6 g Ni/l, 53 g  $\text{Na}_2\text{SnO}_3$ /l and 10 g NaOH/l, (alloys of

Card 1/3

Electrodeposition of a Sn-Ni ...

S/539/61/000/032/013/017  
D204/D301

20-26% Ni were bright), but the current efficiency fell sharply on increasing the Ni and lowering the Sn content in the electrolyte and at lower temperatures. Thus on increasing Ni from 0.06 to 0.6 g/l at 75°C, at  $D_k = 1 \text{ amp/dm}^2$ , the current efficiency decreased from 65 to 8%.

A proportion of Ni in the deposit rose with increasing Ni content of the solution, but was practically unaffected by changes in temperature or  $D_k$ . Cathode polarization in the deposition of the alloy was more pronounced than during the deposition of Sn alone. The results are discussed in terms of the polarization curves derived for the various processes taking place, concluding that the joint deposition of Ni and Sn facilitates the evolution of H<sub>2</sub> by reducing its overvoltage on the cathode. Passivated Sn anodes or anodes of Sn and an insoluble metal were found suitable and the following conditions are recommended for the deposition of an alloy containing 5-12% Ni: electrolyte composition - Sn (as Na<sub>2</sub>SnO<sub>3</sub>) 30g/l, Ni (as Ni(CN)<sub>2</sub>) 0.06 ~ 0.12 g/l, NaOH 10 g/l, NaCN 0.25 g/l; temperature 75°C;  $D_k$  equal to 1 amp/dm<sup>2</sup>. Analyses of the electrolyte and of the

Card 2/3

Electrodeposition of a Sn-Ni...

S/539/61/000/032/013/017  
D204/D301

deposits are described in some detail. There are 6 figures, 1 table and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: J.W. Cuthbertson, N. Parkinson and H.P. Rookaby, J. Electrochem. Soc., 100, 3, (1953).

✓

Card 3/3

CHVANKINA, M. A.

"Feeding of Young Commercial Carp of the Rybinskoye Reservoir." Cand Biol Sci,  
Moscow City Pedagogical Inst imeni V. P. Potemkin, Moscow, 1955. (KL, No 14, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended  
at USSR Higher Educational Institutions (16).

CHVANKINA, M.A.

Food relationships of the young of fishes in Rybinsk Reservoir. Vop.  
ikht. 1 no. 1:107-118 '61. (MIRA 14:5)

1. Kafedra zoologii Yaroslavskogo gosudarstvennogo pedagogicheskogo  
instituta imeni K.D. Ushinskogo.  
(Rybinsk Reservoir--Fishes--Food)

MAKKOVEYEVA, I.I.; CHVANKINA, M.A.

Feeding habits and food relationships of young roach and bream  
in the Kostroma reach of Gorkiy Reservoir. Dokl. na nauch. konf.  
1 no.4:65-69 '62. (MIRA 16:8)  
(Gorkiy Reservoir--Fishes--Food) (Gorkiy Reservoir--Roach (Fish))  
(Gorkiy Reservoir--Bream)

N V CHVANKINA, V N LEBEDEV, and V YU DZHURUK

"Development of a Procedure for Evaluating the Pulse Properties of Promising Receiver-Amplifier Tubes; Investigation of these Properties and Production of Scientifically Based Norms for Inclusion into Technical Specifications and Handbooks" from Annotations of Works Completed in 1955 at the State Union Sci. Res. Inst. Min. of Radio Engineering Ind.

So: B-3,080,964

CHVAN'KOV, I.T. (Gomel'skaya oblast')

Studying decimal fractions before vulgar fractions. Mat. v shkole  
no.2:51 Mr-Ap '62. (MIRA 15:3)  
(Fractions--Study and teaching)

*Chvanov, A.V.*

SIDLIK, L.Z.; CHVANOV, A.V., inzhener.

Frequency doubler for supplying power to cables when locating cable  
faults. Energetik 5 no.6:35-37 Je '57. (MLRA 10:?)  
(Electric cables)

AUTHOR: Chvanov, A.V., Technician SOV-127-58-9-16/20

TITLE: Pneumatic Tipper for the 10-Ton VO-10 Coal Car (Pnevmaticheskiy oprokidyvatel' 10-tonnykh vagonetok VO-10)

PERIODICAL: Gornyy zhurnal, 1958, Nr 9, p 76 (USSR)

ABSTRACT: G.G. Krivosheyev devised a pneumatic tipper for 10-ton VO-10 coal cars used in the mine Ekspluatatsiya of Lebyazhino Mine Administration. This tipper is installed underneath the unloading place. When the coal car stops above the tipper, compressed air activates the cylinders which tip the car, which, after emptying its contents, returns by gravity to its former position. A description of this device is given. There are 2 diagrams.

ASSOCIATION: Lebyazhinskoje rudoopravleniye (The Lebyazhino Mine Administration)

1. Coal--Handling--Equipment    2. Mines--Equipment

Card 1/1

S/196/61/000/011/018/042  
E194/E155

AUTHORS: Lokshin, M.V., and Chvanov, A.V.

TITLE: Location of single-phase faults in cables

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,  
no.11, 1961, 31, abstract 11E 212. (Elektr.  
stantsii, no.6, 1961, 68-71)

TEXT: On the occurrence of a single-phase fault a pair of currents are set up in the portion of the cable between the generator and the fault consisting of the difference between the current in the core and the total current up to the fault location, and the current in the sheath. There is, moreover, a separate current in the damaged core from the generator to the location of the fault and further in the same direction from the fault location in the cable sheath to the end of the cable. A new induction-commutation method of determining the location of a single-phase cable fault consists in finding the magnetic field of the pair of currents of the damaged core and locating the place at which it disappears. Therefore, the new method

Card 1/2

Location of single-phase faults ...

S/196/61/000/011/018/042  
E194/E155

can use a frame with only the vertical magnetic axis. The use of such a frame above the cable ensures minimum reception of the field of the separate current and maximum reception of the field of the pair of currents.

[Abstractor's note: Complete translation.]

Card 2/2

CHVANOV, A. V., inzh.

Building-in of kenotron filament transformers into the IOM-100  
test transformer, Energetik 9 no.11:22-24 N '61.

(MIRA 14.12)

(Electric transformers)

SVI, P.M., inzh.; KHOMYAKOV, M.V., inzh.; CHVANOV, A.V., inzh.

High-frequency flaw detection of the insulation of electric power  
transmission lines. Elek. sta. 32 no.12:36-40 D '61.

(MIRA 15:1)

(Electric insulators and insulation--Testing)  
(Electric lines)

CHVANOV, D.

Workers of a metallurgical plant help a state farm. NTO 5  
no.9:35 S '63. (MIRA 17:6)

1. Zamestitel' predsedatelya Sverdlovskogo oblastnogo pravleniya  
Nauchno tekhnicheskogo obshchestva chernoy metallurgii.

CHVANOV, K.N.

Remote control on the railway electrification project  
Moscow-Volokolamsk. Elek. i tepl. tiaga 3 no.8:16-17 Ag  
'59. (MIRA 12:12)

1. Nachal'nik uchastka energosnabzheniya, Moskovskaya doroga.  
(Moscow Province--Electric railroads)  
(Remote control)

ZAYKOV, M.A.; TSELUYKOV, V.S.; KAMINSKIY, D.M.; DADOKHIN, N.V.; LAR'KINA,  
F.G.; MESHCHERYAKOV, P.A.; Prinimali uchastiye: PERMYAKOV, V.M.;  
MERKUTOV, V.N.; PROKOP'YEV, KAFTNAOV, M.P.; MARAMYGIN, G.F.;  
ZHURAVLEV, M.A.; MARININ, P.G.; NASIRUDIN, A.S.; MANCHEVSKIY, I.V.;  
FELYAVSKIY, M.A.; SERGEYEV, V.V.; CHVANOV, L.K.; KOBYLEV, V.K.;  
KUCMKO, I.I.; MIRENSKIY, M.L.

Pressure of the metal on rolls in rolling carbon and alloyed steels  
on a three-high billet mill. Izv. vys. ucheb. zav.: chern. met. 4  
no.8:78-83 '61. (MIRA 14:9)

1. Sibirskiy metallurgicheskiy institut.  
(Rolling mills)

ZAYKOV, M.A.; TSELUYKOV, V.S.; KAMINSKIY, D.M.; DADOCHKIN, N.V.;  
MESHCHERYAKOV, P.A.; MARININ, P.G.; MIRENSKIY, M.L.; PROKOP'YEV,  
A.V.; OVCHINNIKOVA, R.F.; Prinimali uchastiye; BELYAVSKIY, M.A.;  
KAFTANOV, M.P.; KUCHKO, I.I.; LAR'KINA, F.Ye.; MANCHEVSKIY, I.V.;  
MARAMYGIN, G.F.; MERKUTOV, V.N.; NASIBULIN, A.S.; NEFEDOV, M.K.;  
PERMYAKOV, V.M.; CHELYSHEV, N.A.; CHVANOV, L.K.

Investigating conditions of rolling on three-high billet mills.  
Izvy vys. ucheb. zav.; chern. met. 6 no.10:74-83 '63.

(MIRA 16:12)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy  
kombinat.

VVEDENSKIY, V.T.; CHVANOV, N.A.

Transistor threshold circuit with a high input impedance. Prib.i  
tekhn.eksp. 6 no.5:71-73 S-0 '61. (MIRA 14:10)  
(Transistor circuits)

PETROV, Ye.I.; NOVOSELOV, V.A.; Prinimali uchastiye: CHVANOV, P.A.;  
SHIROKOV, L.F.; KOROBKOV, V.P.; KULAYEV, P.A.; POPKOVA, L.F.;  
LEBEDEV, I.M.; BAKAYEV, A.M.

Flotation of Sibay deposit zinc ores. TSvet. met. 35 no.3:  
15-18 Mr '62. (MIRA 15:4)  
(Flotation) (Sibay region--Zinc ores)

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000309210010-5

VERSHININ, Ye.A.; FILIMONOV, V.N.; KISLYAKOV, L.D.; CHVANOV, P.A.;  
BELYAYEV, M.A.; KOROBKOV, V.P.

Efficient flotation flow chart for collective concentrates at the  
Sibay plant. TSvet. met. 38 no.4:14-17 Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000309210010-5"

CHVANOV, V.

For the over-all mechanization of labor-consuming processes.  
Sev.prefseiumy 4 no.3:36-38 Mr '56. (MIRA 9:7)

1.Nachal'nik mekhanicheskogo tekha Moskovskoy shveychnoy fabriki imeni Shkiryatova.  
(Machinery in industry)

CHVANOV, V.

Literature on road construction to be published in 1962. Avt.dor.  
25 no.1:30-31 Ja '62. (MIRA 15:2)  
(Bibliography—Road construction)

LOZOVOY, D.A., kand. tekhn. nauk; KOSTIN, A.A., inzh.; OSTROVSKIY, A.;  
TSYGANOV, R.; CHVANOV, V.

Reviews and bibliography. Avt. dor. 28 no.4:30-42 Ap '65.  
(MIRA 18:5)

CHVANOV, V.G.

MOGILEVSKIY, Dmitriy Aleksandrovich, dotsent; BABKOV, Valeriy Fedorovich, prof., doktor tekhn.nauk; SMIRNOV, Andrey Sergeyevich, kand.tekhn.nauk; ABRAMOV, Leonid Tikhonovich, kand.tekhn.nauk; ZAYTSEV, Filipp Yakovlevich, kand.tekhn.nauk; ZAMAKHAYEV, Mitrofan Semenovich, kand.tekhn.nauk; NIKITIN, Sergey Mikhaylovich, inzh.; BIRULYA, A.K., prof., retsenzent; DUDKIN, P.A., kand.tekhn.nauk, retsenzent; AVDYEV, V.N., ratsenzent; KARTASHEV, V.A., retsenzent; PAL'CHEV, A.G., retsenzent; POPOV, A.N., retsenzent; PTITSIN, I.G., retsenzent; ROMA-NENKO, I.A., prof., retsenzent; BARATS, L.A., prepodavatel', retsenzent; BASKEVICH, N.I., prepodavatel', ratsenzent; BEL'SKIY, A.Ye., prepodavatel', retsenzent; KALUZHISKIY, Ya.A., prepodavatel', retsenzent; CHVANOV, V.G., red.; MAL'KOVA, N.V., tekhn.red.

[Locating and designing airfields] Izyskania i proektirovanie aerodromov. Pod red. V.F.Babkova. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transporta i shosseinykh dorog RSFSR, 1959. 566 p. (MIRA 13:3)

1. Khar'kovskiy avtomobil'no-dorozhnyy institut (for Romanenko, Barats, Baskevich, Bel'skiy, Kaluzhskiy).  
(Airports--Planning)

CHVANOV, V.G.

MIRONOV, V.A.; ZAMAKHAYEV, M.S., dotsent, kandidat tekhnicheskikh nauk,  
redaktor; CHVANOV, V.G., redaktor; GALAKTIONOVA, Ye.N., tekhniches-  
kiy redaktor

[Manual for road building foremen] Posobie dlja desiatnika dorozhniku.  
Pod obshchey red. M.S.Zamakhaeva. Moskva, Izd-vo dorozhno-tekhn.  
lit-ry Gushosdora MVD SSSR, 1952. 237 p. [Microfilm] (MIRA 10:1)  
(Road construction)

FEDOSEYEV, P.A.; CHVANOV, V.G., redaktor; MAL'KOVA, N.V., tekhnicheskiy  
redaktor.

[Tables for dividing circular curves by the chord method] Tablitsy  
dlya razbivki krugovykh krikykh sposobom khord. Moskva, Min. avto-  
mobil'nogo transporta i shosseinykh dorog. 1953. 38 p. (MLR 7:11)  
(Curves)

CHVANOV, V. G.

VEDENISOV, B.N., otvetstvennyy redaktor [deceased]; CHVANOV, V.G., redaktor;  
KISELEVA, A.A., tekhnicheskiy redaktor

[Problems of increasing efficiency in the transportation industry]  
Problemy povysheniia effektivnosti raboty transporta. Moskva, Izd-  
vo Akademii nauk SSSR. Vol. 1. 1953. 300 p. (MLRA 7:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Vedenisov) 2. Aka-  
demiya nauk SSSR. Sektsiya po nauchnoy razrabotke problem transporta.  
(Highway engineering)  
(Railroad engineering)

CHVANOV, V.G.

ZAMAKHAYEV, Mitrofan Semenovich, kandidat tekhnicheskikh nauk, dotsent;  
MIRONOV, Viktor Alaksandrovich; CHVANOV, V.G., redaktor; KOGAN,  
F.I., tekhnicheskiy redaktor.

[Road foreman's manual] Posobie desiatniku dorozhniku. Izd. 2-e,  
perer. Moskva, Nauchno-tekhn.izd-vo avtotransp.lit-ry, 1954. 267 p.  
[Microfilm] (MLRA 8:5)  
(Road construction)

LYAKHOV, G.M.; CHERKASHIN, V.A., otvetstvennyy redaktor; CHVANOV, V.G.,  
redaktor; ALEXSEYEVA, T.V., tekhnicheskiy redaktor.

[Quarrying gravel and sand deposits] Razrabotka graviinykh i  
peshchanykh mestorozhdenii. Moskva, Izd-vo Akad. nauk SSSR,  
1954. 223 p.  
(Quarries and quarrying) (Gravel) (Sand)

(MLRA 8:1)

*CHVANOV, V.G.*

NEKRASOV, Vladimir Konstantinovich; SOBOLEV, S.S., professor, redaktor;  
CHVANOV, V.G., redaktor; KOVALIKHINA, N.F., tekhnicheskiy redaktor

[Erosion control and use of roadside gullies] *Ukreplenie i ispol'-zovanie pridorozhnykh ovragov. Pod red. prof. S.S.Soboleva. Moskva, Nauchn.-tekhn. izd-vo avtotransportnoi lit-ry, 1954. 59 p. (MIRA 8:3)*  
(Roadside improvement) (Erosion)

MYL'NIKOV, P.V.; CHVANOV, V.G.; redaktor; MULIKOVA, I.F., tekhnicheskiy  
redaktor.

[Manual of safety measures for stokers of steam boilers] Pamiatka  
po tekhnike bezopasnosti dlia kochegara parovogo kotla. Moskva,  
Nauchno-tekhn. izd-vb avtotransportnoi lit-ry, 1954. 37 p.,  
(Steam boilers--Safety measures) (MLRA 8:8)

AKSINOVICH, Yefim Vasil'yevich; CHVANOV, V.G., redaktor; GALAKTIONOVA,  
Ye.N., tekhnicheskiy redaktor

[Using gravelly asphalt concrete] Primenenie graviinogo asfal'to-  
betona. Moskva, Nauchno-tekhn.izd-vo avtotransportnoi lit-ry, 1955.  
61 p.

(MIRA 9:2)

(Asphalt concrete)

POLOSIN-NIKITIN, Serafin Mikhaylovich; CHVANOV, V.G., redaktor;  
GALAKTIONOVA, Ye.N., tekhnicheskiy redaktor.

[Mechanization of work in road construction] Mekhanizatsiya  
rabot na dorozhnom stroitel'stve. Moskva, Nauchno-tekhn.  
izd-vo avtotransportnoi lit-ry, 1955. 458 p. (MLRA 8:10)  
(Road construction)

CHVANOV, V.G.

ALEKSANDROV, Boris Sergeyevich; ALEKSEYEV, A.P.; ZABOLOTSKIY, P.D.; KONDAKOV, A.Yu.; NEGODAYEV, V.I.; RYB'YEV, I.A.; SARSATSKIKH, P.I.; CHARUYSKIY, A.P.; SHOMINOV, I.S.; BABKOV, V.F., doktor tekhnicheskikh nauk, professor, redaktor; CHVANOV, V.G., redaktor; MAL'KOVA, N.V., tekhnicheskiy redaktor.

[Handbook for road foremen] Spravochnoe rukovodstvo dlja dorozhnogo mastera. Pod red. V.F.Babkova. Moskva, Nauchno-tekhn. izd-vo avtotransportnoi lit-ry, 1954. 450 p. [Microfilm] (MLR 8:2)  
(Roads)

CHVANOV, V.G.

OBRAZTSOV, V.N., 1874-1949; SHAUL'SKIY, F.I., doktor tekhnicheskikh nauk,  
professor; ZEMBLINOV, S.V., doktor tekhnicheskikh nauk, professor;  
SOSKOVICH, V.A., doktor tekhnicheskikh nauk, professor; [deceased];  
NIKITIN, V.D., doktor tekhnicheskikh nauk, professor; KOCHNEV, F.P.,  
doktor tekhnicheskikh nauk, professor; TIKHOMIROV, N.M.; CHVANOV, V.G.,  
redaktor; ZELENKOVA, Ye.G., tekhnicheskiy redaktor

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akademii nauk  
(MLRA 9:1)  
SSSR. Vol. 1. 1955. 444 p.  
(Railroads) (Transportation)

CHVANOV, V.G.

LYSIKHINA, A.I., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii;  
KHANINA, T.S.G., mladshiy nauchnyy sotrudnik; CHVANOV, V.G., redaktor;  
KOGAN, F.L., tekhnicheskiy redaktor

[Technical specifications for the laying asphalt concrete pavements  
in the city] Tekhnicheskie pravila ustroistva dorozhnykh pokrytii iz  
asfal'tobetona, primenyaemogo v goriachem sostoianii. Moskva, Nauchno-  
tekhn. izd-vo avtotransp. lit-ry, 1955. 115 p. (MLRA 9:10)

I. Russia (1923- U.S.S.R.) Ministerstvo avtomobil'nogo transporta  
i shosseynykh dorog. Tekhnicheskoye upravleniye.  
(Pavements, Concrete)

CHVANOV, V.G.

PLAKSIN, I.N.; MYASNIKOVA, G.A.; OKOLOVICH, A.M.; GLIMBOTSKIY, V.A.  
redaktor; CHVANOV, V.G., redaktor; MAKUNI, Ye.V., tekhnicheskij  
redaktor.

[Flotation of arsenopyrites] Flotatsionnoe obogashchenie mysh'-  
iakovopiritnykh rud. Moskva, Izd-vo Akademii nauk SSSR, 1955.  
(MLRA 8:10)  
110 p.  
(Arsenopyrite) (Flotation)

CHVANOV, V.G.

KHAYKIN, Yakov, Borisovich, sostavitel'; ORNATSKIY, N.V., professor, doktor  
tekhnicheskikh nauk, redaktor; CHVANOV, V.G., redaktor; GALATIONOVA,  
Ye.N., tekhnicheskiy redaktor

[Road builder's English-Russian dictionary] Anglo-russkii slovar'  
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FEDOROV, Nikolay Vasil'yevich; KORSHAK, Fedor Afanas'yevich; CHVANOV, V.G.  
redaktor; KOGAN, F.L., tekhnicheskiy redaktor

[Geodesy] Geodeziia. Izd. 4-oe, perer. Moskva, Nauchno-tekhn. izd-vo  
avtotransp. lit-ry. 1956. 403 p. (MLRA 10:1)  
(Geodesy)

POLOGIN-NIKITIN, Serafim Mikhaylovich; CHVANOV, V.G., red.; LAKHMAN,  
F.Ye., tekhn.red.

[Using excavating machinery in road construction] Zemleroinye  
mashiny na dorozhnom stroitel'stve. Izd. 2., ispr. i dop.  
Moskva, Nauchno-tekhn.izd-vo avtotransp. lit-ry, 1958. 87 p.  
(MIRA 12:2)

(Road machinery) (Excavating machinery)

CHVANOV, V.

KOZLOVA, Yelena Nikolayevna, kand. tekhn. nauk; IVANOV, N.N., prof., red.;  
CHVANOV, V.G., red.; ZUYEVA, N.K., tekhn. red.

[Cold asphalt concrete] Kholodnyi asfal'tobeton. Pod red. N.N.  
Ivanova. Moskva, Nauchno-tekhn. izd-vo avto-transp. lit-ry.  
(MIRA 11:8)  
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Sixty-two carriers of Str. haemolyticus A and/or pathogenic M. pyogenes aureus were treated with 600,000 U. pendepon. After an i.m. injection the positive pharyngeal and/or nasal smear became negative in 5 to 7 days and remained so during the 30 to 40 days of the follow-up, the patients remaining ambulant. In all the patients, the blood level remained over 0.02 to 0.03 U. for 5 days. In those cases, penicillin was afterwards found in the urine. When the blood level rose, negative before the removal of tonsils with chronic lesions, followed by the injection of pendepon.

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same)

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"...and I am not the first to do so. I have been told by many  
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Felix Saunders